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DEPARTMENT OF COMMERCE AND LABOR

COAST AND GEODETIC SURVEY

O. H. TITTMANN, Superintendent

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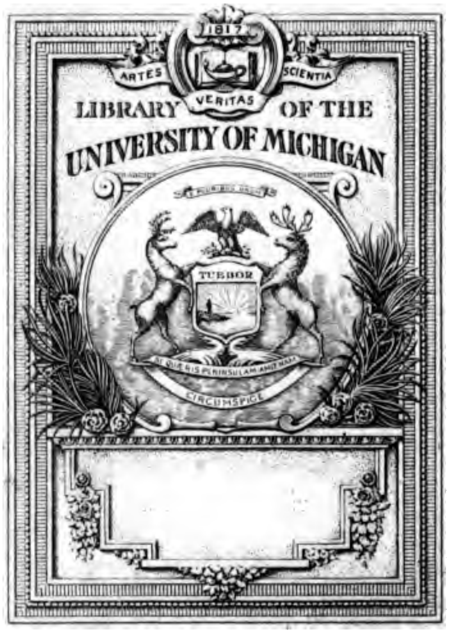
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DEPARTMENT OF COMMERCE AND LABOR
COAST AND GEODETIC SURVEY
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# LIST OF PUBLICATIONS OF THE COAST AND GEODETIC SURVEY AVAILABLE FOR DISTRIBUTION.

The publications here listed are, with a few exceptions, arranged chronologically under their respective subjects. They can be obtained free of charge upon application to the Superintendent, Coast and Geodetic Survey, Washington, D. C., except Coast Pilots and Tide Tables, which are sold at the cost of paper and printing. The "List and Catalogue," which is a bibliography of the publications issued by this Bureau, may be consulted at any public library, or obtained free upon application to the Superintendent, Coast and Geodetic Survey, Washington, D. C.

The list of subject headings below, arranged in logical, systematic order, will be of assistance in determining under what classification publications on any subject treated are located.

## SUBJECT HEADINGS.

### GEODESY.

#### GENERAL.

- Arc measures.
- Bibliography.
- Constitution of the earth.
- Ellipticity of the earth.
  - Spheroid.
- Figure of the earth.
- Plumb line deflection.
- Gravity.
  - Pendulum.
- Geodetic conferences.
  - International geodetic association.
- Instruments.

#### ASTRONOMY.

- Geographic positions.
- Azimuth.
- Latitude.
  - Latitude variation.
- Longitude.
  - Longitude (telegraphic).
  - Moon culminations.
  - Lunar distances.
  - Lunar spots.
  - Lunar tables.
  - Occultations.

#### ASTRONOMY—continued

- Longitude—Continued.
  - Star transits.
    - Transit errors.
- Time.
  - Star factors.
- Stars.
  - Declination.
  - Polaris.
  - Star catalogues.
- Eclipses.
- Mars.
- Mercury, Transit of.
- Moon.
- Sun.
  - Sun spots.
- Venus, Transit of.
- Personal equation.
- Instruments.
  - Artificial horizons.
  - Chronograph.
  - Longitude instrument.
  - Meridian instrument.
    - Meridian telescope.
  - Personal equation apparatus.
  - Transit instrument.
  - Zenith telescope.

#### TRIANGULATION.

- Reconnaissance.
- Base measurement.
  - Base measures.
  - Base measuring apparatus.
- Horizontal measures.
  - Signals.
  - Intervisibility.
  - Theodolite.
    - Micrometer.
- Vertical measures.
- Adjustment.
- Geographic positions.
- Refraction.
- Earthquakes.

#### HYPSOMETRY.

- Leveling.
  - Leveling instruments.
  - Leveling rods.
- Elevations.
  - Bench marks.
  - Sea level.
  - Water levels.
- Vertical measures.
- Barometric hypsometry.

### HYDROGRAPHY.

- Hydrographic surveying.
  - Hydrographic reconnaissance.
  - Hydrographic sheets.
  - Coast pilot (sailing directions).
- Sounding.
  - Depths.
  - Sounding apparatus.
- Tides.
  - Cotidal lines.
  - Earthquake waves.
  - Harbors.
  - Moon.
  - Elevations.
    - Bench marks.
    - Sea level.
    - Water level.
  - Mathematics.
    - Equilibrium theory of tides.

- Tides—Continued.
  - Mathematics—Cont'd.
    - Harmonic analysis.
  - Instruments.
    - Tide tables.
    - Tide indicator.
    - Tide gauge.
    - Tide predicting machine.
- Currents.
  - Current float.
  - Current meter.
- Physical hydrography.
  - Anchorages.
  - Bars.
  - Channels.
  - Coast features.
  - Harbors.
  - Oyster beds.
  - Rivers.
  - Sea level.

- Physical hydrography—Con.
  - Shoals.
  - Shore line changes.
  - Tide lands.
  - Wind effects on water.
- Oceanography.
  - Ocean depths.
    - Depth recorder.
  - Ocean temperatures.
  - Sea water.
    - Sea water densities (salinity).
      - Hydrometer (densimeter).
  - Sea bottom.
    - Dredging.
    - Dredging apparatus.

## TOPOGRAPHY.

- Topographic conference.
- Topographic sheets.
- Topographic instruments.
  - Plane table.
  - Interranger.
- Three point problem.
- Surveying.
  - Surveys.
    - Land surveys.
- Phototopography.

## TERRESTRIAL MAGNETISM.

- Magnetic elements.
- Magnetic declination.
  - Meridian lines.
- Magnetic inclination.
- Magnetic intensity.
- Magnetic variations.
  - Magnetic variations (secular).
- Magnetic surveys.
- Magnetic methods.
- Magnetic instruments.
  - Dip instrument.
  - Magnetic needle.
  - Magnetometer.
- Magnetic observatories.
- Auroras.
- Atmospheric electricity.

## CHART CONSTRUCTION.

- Projections.
  - Projection tables.
- Drawing.
  - Paper.
  - Lettering.
  - Shading.
  - Pantograph.
- Photography.
- Engraving.
  - Etching.
  - Lithography.
    - Lithographic transfers.
- Electrotyping.
- Printing.
  - Paper.
- Cartography.
  - Charts.
  - Maps.

## ALLIED SUBJECTS.

### MATHEMATICS AND COMPUTATION.

- Arithmetic.
- Equations, solution of.
- Functions.
- Interpolation.
- Least square method.
- N point problem.
- Tables.
- Trajectory of shot.

### PHYSICS.

- Aberration.
- Expansion.
- Electricity.
  - Electro-magnetism.
  - Transmission time.
- Hydraulics.
- Motion.
  - Viscous fluid.
- Spectrum.

### STANDARDS.

- Balances.
- Kilogram.
- Meter.
  - Metric tables.

### STANDARDS—continued.

- Mile.
- Weights and measures office.
- Yard.

### GEOGRAPHY.

- Boundaries.
- Eminent domain.
- Expeditions.
- Geographic exploration.
- Geographic names.
- Royal military geographic institute.
- Relief models.
- Voyages.

### GEO-PHYSICS.

- Meteorology.
  - Atmosphere.
  - Climate.
- Winds.
- Geology.
  - Phosphates.
  - Sand.

### ENGINEERING.

- Marine engineering.
  - Boilers.
    - Coal economy.
  - Engines.
  - Log instruments.
- Hydraulic engineering.
  - Canals.
    - Ship canals.
  - Docks.
  - Levees.
  - Light-houses.
  - Piers.

### GENERAL.

- Bibliography.
- Expositions.
- History.
- Biography.
- Languages.
- Research.
- Zoology.

## ANNUAL REPORTS.

Report of the Superintendent of the Coast Survey, showing the progress of the Survey during the year 1859. xvi+370 pp., 1 fig., 35 maps and sketches, 4 diags. 1860.

Same, 1860. xx+409 pp., 1 fig., 22 maps and sketches, 8 diags. 1861.

Same, 1861. viii+270 pp., 1 fig., 29 maps and sketches, 2 diags. 1862.

Report of the Superintendent of the United States Coast Survey, showing the progress of the Survey during the year 1866. xii+140 pp., 3 figs., 24 maps and sketches, 4 pls., 1 diag. 1869.

Same, 1867. xii+334 pp., 4 figs., 2 pls., 23 maps and sketches, 3 diags. 1869.

Same, 1868. xiii+277 pp., 14 figs, 28 maps and sketches, 1 diag. 1871.

Same, 1871. xv+219 pp., 11 figs., 30 maps and sketches, 5 diags. 1874.

Same, 1873. xii+180 pp., 2 figs., 18 maps and sketches, 3 diags. 1875.

Same, 1874. xiv+242 pp., 13 figs., 1 pl., 23 maps and sketches, 1 diag. 1877.

ANNUAL REPORTS—continued.

Same, 1876. xxii+418 pp., 28 figs., 25 maps and sketches, 13 diags. 1879.

Same, 1877. xxiii+192 pp., 7 figs., 25 maps and sketches. 1880.

Report of the Superintendent of the United States Coast and Geodetic Survey, showing the progress of the work during the fiscal year ending with June, 1878. xxiii+306 pp., 1 fig., 1 pl., 30 maps and sketches, 9 diags. 1881.

Same. 1879. xxv+214 pp., 2 figs., 2 pls., 34 maps and sketches, 15 diags. 1881.

Same, 1880. xxii+419 pp., 4 figs., 12 pls., 48 maps and sketches, 28 diags. 1882.

Same, 1881. xxiii+471 pp., 12 figs., 11 pls., 40 maps and sketches, 16 diags. 1883.

Same, 1882. xxiii+565 pp., 27 figs., 32 maps and sketches, 17 diags. 1883.

Same, 1883. xxvi+488 pp., 11 figs., 26 maps and sketches, 24 diags. 1884.

Same, 1884. xxviii+622 pp., 8 figs., 23 maps and sketches, 3 diags. 1885.

Same, 1885. xxiii+516 pp., 4 figs., 1 pl., 26 maps and sketches, 19 diags. 1886.

Same, 1887. xxxvii+514 pp., 1 fig., 34 maps and sketches, 15 diags. 1889.

Same, 1888. xxviii+566 pp., 4 figs., 12 pls., 42 maps and sketches, 7 diags. 1889.

Same, 1889. xxx+506 pp., 3 figs., 34 maps and sketches, 18 diags. 1890.

Same, 1890. xxix+780 pp., 29 figs., 17 pls., 35 maps and sketches, 20 diags. 1891.

Same, 1891. In two parts.
  Part I. [Report.] xxxiii+187 pp., 20 maps and sketches. 1892.
  Part II. Appendices relating to the methods, discussions, and results of the Coast and Geodetic Survey. 746 pp., 26 figs., 6 pls., 5 maps, 23 diags. 1892.

Same, 1892. In two parts.
  Part I. [Report.] xxxiv+199 pp., 17 maps and sketches. 1893.
  Part II. Appendices relating to the methods, discussions, and results of the Coast and Geodetic Survey. viii+552 pp., 10 figs., 7 pls., 6 maps, 22 diags. 1894.

Same, 1893. In two parts.
  Part I. [Report.] xxix+169 pp., 19 maps and sketches. 1894.
  Part II. Appendices relating to the methods, discussions, and results of the Coast and Geodetic Survey. v+639 pp., 48 figs., 18 pls., 6 maps, 2 facsims., 11 diags. 1895.

Same, 1894. In two parts.
  Part I. [Report.] xvi+165 pp., 20 maps and sketches. 1895.
  Part II. Appendices relating to the methods, discussions, and results of the Coast and Geodetic Survey. 615 pp., 10 figs., 4 pls., 5 maps, 5 diags. 1895.

Same, 1895. xx+516 pp., 10 figs., 4 pls., 5 maps and sketches, 5 diags. 1896.

Same, 1897. xxi+774 pp., 143 figs., 17 pls., 22 maps and sketches, 12 diags. 1898.

Same, 1899. 952 pp., 13 figs., 14 pls., 30 maps. 1900.

Same, 1900. 724 pp., 138 figs., 39 pls., 83 maps, 15 diags. 1901.

Same, 1901. 440 pp., 2 figs., 15 pls., 50 maps and sketches, 2 diags. 1902.

Same, 1902. 799 pp., 13 views, 76 maps and sketches (4 progress sketches in pocket), 5 diags. 1903.

Same, 1903. 1032 pp., 8 views, 72 maps and sketches (4 progress sketches in pocket), 11 diags. 1903.

Report of the Superintendent of the Coast and Geodetic Survey, showing the progress of the work from July 1, 1903, to June 30, 1904. 774 pp., 79 illus., 56 maps and sketches (4 progress sketches in pocket). 1904.

Same, 1905. 347 pp., 6 illus., 4 maps, 31 diags., 4 progress sketches in pocket. 1905.

Same, 1906. 230 pp., 1 illus., 1 map and 9 progress sketches in pocket. 1906.

Same, 1907. 561 pp., 7 illus., 2 maps, 29 diags., 7 charts (2 in colors), 9 progress sketches in pocket. 1907.

## GEODESY.

Description of an apparatus for measuring subsidiary base lines. By J. E. Hilgard. Report for 1857, app. 45, p. 395–398, sketch 69.

Report upon the determination of the longitude of America and Europe from the solar eclipse of July 28, 1851. By Benjamin Peirce. Report for 1861, app. 16, p. 182–195.

Report of Benjamin Peirce on an example for the determination of longitudes by occultations of the Pleiades. Report for 1861, app. 17, p. 196–221.

Abstract of the report of B. A. Gould on the determination of longitude at Albany, N. Y., by the telegraphic method. Report for 1861, app. 18, p. 221–232.

Observations of the solar eclipse of 1860, July 18, made at the Coast Survey station, Gunstock Mountain, New Hampshire, by A. D. Bache. Report for 1861, app. 19, p. 232–239, sketch 29.

Observations of the solar eclipse of July 18, 1860, made at the Coast Survey office, Washington, D. C., by Charles A. Schott. Report for 1861, app. 20, p. 239–241.

Observations of the solar eclipse of July 18, 1860, made at Cambridge, Mass., by B. A. Gould. Report for 1861, app. 21, p. 241, 242.

Report on observations of the solar spots made at the Coast Survey office, Washington, D. C., from August, 1860, to December, 1861, both inclusive, by Charles A. Schott. Report for 1861, app. 25, p. 259–261, sketch 29.

Results of the primary triangulation of the coast of New England, from the northeastern boundary to the vicinity of New York. Report for 1865, app. 21, p. 187–203.

Determination of time by means of the transit instrument. By C. A. Schott. Report for 1866, app. 9, p. 55–71, 1 fig.

Determination of the astronomical latitude of a station by means of the zenith telescope. By C. A. Schott. Report for 1866, app. 10, p. 72–85, sketch 28.

Determination of the astronomical azimuth of a direction. By C. A. Schott. Report for 1866, app. 11, p. 86–99, sketches 26 and 27.

Standard mean places of circumpolar and time stars, prepared for the use of the U. S. Coast Survey. By B. A. Gould. 2d ed. 15 pp. 1866.

On the use of railways for geodetic surveys. By J. E. Hilgard. Report for 1867, app. 9, p. 140–144, sketch 26.

Methods, discussions, and results. Field work of the triangulation. By R. D. Cutts. Report for 1868, app. 7, 2d ed. 45 pp., 11 figs. 1877.

Addenda to appendices No. 9 and No. 11 of the Coast Survey report of 1866. By Charles A. Schott. Report for 1868, app. 10, p. 154–165.

Reports of observations of the eclipse of the sun on August 7, 1869, made by parties of the United States Coast Survey, at the following principal stations: Bristol, Tenn., in charge of R. D. Cutts; Shelbyville, Ky., in charge of J. Winlock and G. W. Dean; Springfield, Ill., in charge of C. A. Schott, under the immediate direction of the Superintendent of the Survey; Des Moines, Iowa, in charge of J. E. Hilgard; and Kohklux, Chilkaht River, Alaska, in charge of G. Davidson. Report for 1869, app. 8, p. 116–198, illustrated by woodcuts and plates nos. 24, 25, and 26, 16 figs., 1 map, 2 diags.

On the use of the zenith-telescope for observations of time. By J. E. Hilgard. Report for 1869, app. 12, p. 226–232.

Extract from a report to Benjamin Peirce, relative to a method of determining elevations along the course of a tidal river, without the aid of a leveling instrument, by Henry Mitchell. Report for 1870, app. 11, p. 98, 99.

Results of the telegraphic determination of the longitude of San Francisco, Cal. Report for 1870, app. 12, p. 100.

Abstract of results for difference of longitudes between the Harvard College Observatory, Cambridge, Mass., the Coast Survey station, Seaton, on Capitol Hill, and the United States Naval Observatory, Washington, D. C., as determined by means of the electric telegraph, in 1867, by the United States Coast Survey, with the cooperation of Joseph Winlock and B. F. Sands. Report for 1870, app. 13, p. 101–106.

Reports of observations upon the total solar eclipse of December 22, 1870. Report for 1870, apps. 16 and 16a, p. 115–177 and 229–232, 8 figs., 1 pl., 1 diag.

## GEODESY—continued.

Determination of weights to be given to observations for determining time with portable transit-instruments, recorded by the chronographic method. By Charles A. Schott. Report for 1872, app. 12, p. 222–226.

Measurement of a primary base-line on Peach-Tree ridge, near Atlanta, Ga., in 1872 and 1873. By C. O. Boutelle. Computed and reported by Charles A. Schott. Report for 1873, app. 12, p. 123–131.

Note on intervisibility of stations. By J. E. Hilgard. Report for 1873, app. 13, p. 137, 1 fig.

A list of stars for observations of latitude. Report for 1873, app. 14, p. 138–174.

Errata in the Heis catalogue of stars. Report for 1873, app. 15, p. 175–180.

Geographical positions of prominent places in the United States determined astronomically or geodetically by the United States Coast Survey. Report for 1874, app. 6, p. 62–65.

Transit of Venus, 1769. Results of observations for determining positions occupied in Lower California and at Philadelphia, reported by Charles A. Schott. Report for 1874, app. 10, p. 131–133, 1 map (sketch 22).

Improved clamp for the telescope of the theodolite. By George Davidson. Report for 1874, app. 15, p. 153, 1 fig.

Description of two forms of portable apparatus for the determination of personal equation, both relative and absolute, in observations of star transits. By J. E. Hilgard. Report for 1874, app. 17, p. 156–162, 1 fig., 1 diag.

Transatlantic longitudes. Final report on the determination of 1872, with a review of previous determinations. By J. E. Hilgard. Report for 1874, app. 18, p. 163–242, 7 figs.

Field catalogue of 983 transit stars. Mean places for 1870.0. By G. Davidson, 33 pp. 1874.

The star-factors A, B, C for reducing transit-observations. By G. Davidson. 69 pp. 1874.

A catalogue of stars for observations of latitude. By J. E. Hilgard. Report for 1876, app. 7, p. 83–129.

Comparison of the methods of determining heights by means of leveling, vertical angles and barometric measures, from observations at Bodega Head and Ross Mountain, California. By George Davidson and Charles A. Schott. Report for 1876, app. 16, p. 338–354, 2 figs. [Reprinted from report of 1871, app. 16.]

Observations of atmospheric refraction—Contribution No. II. Determination of several heights by the spirit-level, and measures of refraction by zenith-distances, also observations of the barometer at Ragged Mountain, Maine, in July, August, and September, 1874, by F. W. Perkins. Results deduced and reported by Charles A. Schott. Report for 1876, app. 17, p. 355–367, 1 fig.

On atmospheric refraction and adjustment of hypsometric measures—Contribution No. III. Determination of the coefficient of refraction from zenith-distances observed in northern Georgia, by C. O. Boutelle and F. P. Webber, in 1873 and 1874, and adjustment of differences of heights by application of the method of least squares. Discussion and report by Charles A. Schott. Report for 1876, app. 18, p. 368–387, 2 figs.

On the adaptation of triangulations to various conditions, depending on the configuration or orographic character of a country and on the degree of accuracy aimed at, with due consideration of the time and means available; also notes on the method of observing horizontal angles and directions in geodetic surveys. By Charles A. Schott. Report for 1876, app. 20, p. 391–399, 12 figs. [Reprinted, with additions, from the report for 1871, app. 15.]

The Pamlico-Chesapeake arc of the meridian and its combination with the Nantucket and the Peruvian arcs, for a determination of the figure of the earth from American measures. By Charles A. Schott. Report for 1877, app. 6, p. 84–95.

Description of an improved open vertical clamp for the telescopes of theodolites and meridian instruments, devised by George Davidson. Report for 1877, app. 13, p. 182–183, 1 fig.

## GEODESY—continued.

Observations of the transit of Mercury, May 6, 1878, made at Summit station, Central Pacific Railroad. By B. A. Colonna. Report for 1878, app. 6, p. 81–87, 1 pl., 1 sketch (27).

Observations made at Washington, D. C., of the transit of Mercury, May 6, 1878. By Charles A. Schott. Report for 1878, app. 7, p. 88–91.

Adjustment of the primary triangulation between the Kent Island and Atlanta base-lines. By Charles A. Schott. Report for 1878, app. 8, p. 92–120, 1 fig.

Description of the Davidson meridian instrument. By George Davidson. Report for 1879, app. 7, p. 103–109, 1 pl.

Comparison of local deflections of the plumb-line in latitude, longitude, and azimuth, at stations of the oblique arc along our Atlantic coast, as developed on Bessel's and Clarke's spheroids. By C. A. Schott. Report for 1879, app. 8, p. 110–123, 1 diag.

On the internal constitution of the earth. By Benjamin Peirce. Report for 1879, app. 14, p. 201.

On instruments and methods used for precise leveling in the Coast and Geodetic Survey. By O. H. Tittmann. Report for 1879, app. 15, p. 202–211, 1 fig., 1 pl., 1 diag.

Observations to determine the refraction on lines passing near a surface of water, made at different elevations across the Potomac River. By Andrew Braid. Report for 1879, app. 16, p. 212, 213.

Report on the results of the longitudes of the Coast and Geodetic Survey determined up to the present time by means of the electric telegraph, together with their preliminary adjustment by the method of least squares. By Charles A. Schott. Report for 1880, app. 6, p. 81–92, 1 diag.

Explanation of apparatus for observation of telegraphic longtiudes, with directions for its use. By Edwin Smith. Report for 1880, app. 7, p. 93–95, 2 diags. (34 and 35).

Report on geodesic night signals. By Chas. O. Boutelle. Report for 1880, app. 8, p. 96–109, 1 fig., 1 pl., 1 diag. (36 and 37).

Report on geodesic leveling on the Mississippi River. By Andrew Braid. Report for 1880, app. 71, p. 135–144, 3 diags. (sketches 45, 46, 47).

An account of a perfected form of the contact-slide base apparatus used in the Coast and Geodetic Survey. By J. E. Hilgard. Report for 1880, app. 17, p. 341–345, 1 diag. (sketch 82, figs. 1–8).

Terrestrial magnetism. Directions for magnetic observations with portable instruments. By Charles A. Schott. 3d and enlarged ed. Report for 1881, app. 8, p. 126–158, illus. 34–37. [For ed. 2 see report for 1875, app. 16.]

Meteorological researches. By William Ferrel. Part III. Barometric hypsometry and reduction of the barometer to sea-level. Report for 1881, app. 10, p. 225–268, illus. 38.

On a method of readily transferring the underground terminal marks of a base line. By O. H. Tittmann. Report for 1881, app. 13, p. 357, 358.

On the flexure of pendulum supports. By C. S. Peirce. Report for 1881, app. 14, p. 359–441.

On the deduction of the ellipticity of the earth from pendulum experiments. By C. S. Peirce. Report for 1881, app. 15, p. 442–456, 1 fig.

On a method of observing the coincidence of vibration of two pendulums. By C. S. Peirce. Report for 1881, app. 16, p. 457–460, 3 figs.

On the value of gravity at Paris. By C. S. Peirce. Report for 1881, app. 17, p. 461–463.

Description and construction of a new compensation primary base apparatus, including te determination of the length of the corresponding five-meter standard bars. By Charles A. Schott. Report for 1882, app. 7, p. 107–138, 10 figs., 2 diags.

Report of the measurement of the Yolo base, Yolo County, Cal. By George Davidson. Report for 1882, app. 8, p. 139–149, 1 fig., 1 sketch, 2 diags.

The total solar eclipse of January 11, 1880, observed at Mount Santa Lucia, California. By George Davidson. Report for 1882, app. 20, p. 463–468, 2 *diags.*

GEODESY—continued.

A new reduction of La Caille's observations, made at the Cape of Good Hope and at Paris between 1749 and 1757, and given in his "Astronomiæ Fundamenta," together with a comparison of the results with the Bradley-Bessel "Fundamenta;" also a catalogue of the places of 150 stars south of declination —30°, for the epochs 1750 and 1830. By C. R. Powalky, Ph. D. Report for 1882, app. 21, p. 469–502.

Report of a conference on gravity determinations, held at Washington, D. C., in May, 1882. Report for 1882, app. 22, p. 503–516.

Results for the length of the primary base-line in Yolo County, Cal., measured in 1881 by the party of George Davidson. Computation and discussion of results, by Charles A. Schott. Report for 1883, app. 11, p. 273–288, 1 diag.

Results of observations for atmospheric refraction on the line Mount Diablo to Martinez, California, in connection with hypsometric measures by spirit level, the vertical circle and the barometer, made in March and April, 1880, by George Davidson. Reported by Charles A. Schott. Report for 1883, app. 12, p. 289–321, 1 diag.

Observations of the transit of Venus of December 6, 1882, at Washington, D. C., and at Tepusquet station, California, and at Lehman's ranch, Nevada. By C. A Schott, B. A. Colonna, William Eimbeck, and J. S. Lawson. Report for 1883, app. 16, p. 371–378.

Field catalogue of 1,278 time and circumpolar stars. Mean places for 1885.0. By George Davidson. Report for 1883, app. 18, p. 383–471.

Determinations of gravity at Allegheny, Ebensburgh, and York, Pa., in 1879 and 1880. By Charles S. Peirce. Report for 1883, app. 19, p. 473–487.

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Tide tables for the world. 50 cents.

Tide tables for the Atlantic coast of the United States, including Canada and the West Indies. (Reprinted from the Tide tables for the world.) 15 cents.

Tide tables for the Pacific coast of the United States. (Reprinted from the Tide tables for the world.) 10 cents.

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